

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO.	
09/702,293	10/30/2000	Yair Bourlas	ENSEMB.025A	1424	
7590 02/09/2006			EXAMINER		
Ensemble Communication			HAN, CLEMENCE S		
Skaist Howard Berkeley Law & Technology Group 680 NW Altishin Place Beavertown, OR 97006			ART UNIT	PAPER NUMBER	
			2668		
		DATE MAILED: 02/09/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/702,293	BOURLAS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Clemence Han	2668			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  11 apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONET	I.  lety filed  the mailing date of this communication.  (35 U.S.C. § 133).			
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on <u>28 Not</u></li> <li>2a) ☐ This action is <b>FINAL</b>. 2b) ⊠ This</li> <li>3) ☐ Since this application is in condition for allowant</li> </ul>	action is non-final.	secution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-20,23,27-61 and 63-72 is/are pendir 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 1-8,23,27-61 and 63-72 is/are allowed 6) ☐ Claim(s) 9-11 and 14-20 is/are rejected. 7) ☐ Claim(s) 12 and 13 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration. I.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

### **DETAILED ACTION**

## Claim Objections

1. Claim 17 is objected to because of the following informalities: There is a typographical error in line 4. "ATM trailer cell containing and end-of-message indication" should be "ATM trailer cell containing an end-of-message indication" Appropriate correction is required.

# Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claim 9-11, 14, 15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Allan et al. (US 5,946,313).

Regarding to claim 9, Allan teaches a method for compressing and converting data packets initially in a first fixed-length packet format (ATM cell) to a second packet format (Ethernet frame) for transmission through a link, at least one of the initial data packets including a header containing overhead data appended by a communication system, the method comprising: obtaining a plurality of incoming packets formatted in the first fixed-length format and having common header addressing data (Column 7 Line 36-38); preparing a second-format packet to convey payload data from the plurality of incoming packets by

Art Unit: 2668

mapping the common addressing data into a header of the second-format packet (Column 7 Line 62-64), entering payload data from the plurality of incoming packets into a payload section of the second-format packet (Column 7 Line 60-62, see Figure 3A), and omitting the common addressing data from the payload of the second-format packet (Column 7 Line 40-41 and Column 60-62).

Regarding to claim 10, Allan teaches the common addressing data includes at least one of the first-format header addressing data 22.

Regarding to claim 11, Allan teaches the first-format header is substantially mapped into the second-format header, and the entire first-format header is substantially omitted from the second-format payload (Column 7 Line 60-64, see Figure 3A).

Regarding to claim 14, Allan teaches a portion of the first-format header addressing data of the incoming first-format packet having said common addressing data is disposed in one place within the second-format packet (Column 7 Line 62-64, see Figure 3A).

Regarding to claim 15, Allan teaches the first-format packets comprise ATM cells and the second-format packets are comprise MAC packets (Figure 3A).

Regarding to claim 18, Allan teaches a method for compressing data packets in a first fixed-length packet format to provide data packets in a second

Art Unit: 2668

packet format for transmission through a link, the initial data packets including user data intended for an end user and a header containing overhead data appended by a communication system which is not intended for delivery to an end user, the method comprising: obtaining one or more incoming packets formatted in the first fixed-length format, the incoming packets having an identical first format header comprising first-format overhead data (Column 7 Line 36-38); preparing a secondformat packet to convey data from the one or more incoming packets by (a) mapping the first-format header overhead data into a header of the second-format packet (Column 7 Line 62-64); (b) representing user data from the one or more first-format packets in a payload of the second-format packet (Column 7 Line 60-62, see Figure 3A); and (c) omitting from the second-format payload first-format header overhead data mapped into the second-format packet header of the secondformat packet (Column 7 Line 40-41 and Column 60-62).

# Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claim 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allan et al. in view of Mills et al (US 5,793,427)

Art Unit: 2668

Regarding to claim 16, Allan teaches a method for compressing and converting data packets initially in a first fixed-length packet format (ATM cell) to a second packet format (Ethernet frame) for transmission through a link, at least one of the initial data packets including a header containing overhead data appended by a communication system, the method comprising: obtaining a plurality of incoming packets formatted in the first fixed-length format and having common header addressing data (Column 7 Line 36-38); preparing a secondformat packet to convey payload data from the plurality of incoming packets by mapping the common addressing data into a header of the second-format packet (Column 7 Line 62-64), entering payload data from the plurality of incoming packets into a payload section of the second-format packet (Column 7 Line 60-62, see Figure 3A), and omitting the common addressing data from the payload of the second-format packet (Column 7 Line 40-41 and Column 60-62). Allan, however, does not teach removing padding data from a trailer packet of the plurality of firstformat packets. Mills teaches removing padding data from a trailer packet of the plurality of first-format packets (Column 37 Line 5-10). It would have been obvious to one skilled in the art to modify Allan to remove padding as taught by Mills in order to use the bandwidth more efficiently.

Art Unit: 2668

Regarding to claim 17, Allan teaches the first-format packets comprise ATM cells and the second-format packets are comprise MAC packets (Figure 3A).

Allan, however, does not teach the trailer packet comprises an ATM trailer cell containing an end-of-message indication, and further comprising removing CPCS and SSCS bytes from the ATM trailer cell. Mills teaches the trailer packet comprises an ATM trailer cell containing an end-of-message indication, and further comprising removing CPCS and SSCS bytes from the ATM trailer cell (Column 37 Line 5-10). It would have been obvious to one skilled in the art to modify Allan to remove padding as taught by Mills in order to use the bandwidth more efficiently.

Regarding to claim 19, Allan teaches a method for compressing data packets in a first fixed-length packet format to provide data packets in a second packet format for transmission through a link, the initial data packets including user data intended for an end user and a header containing overhead data appended by a communication system which is not intended for delivery to an end user, the method comprising: obtaining one or more incoming packets formatted in the first fixed-length format, the incoming packets having an identical first format header comprising first-format overhead data (Column 7 Line 36-38); preparing a second-format packet to convey data from the one or more incoming packets by (a)

Art Unit: 2668

mapping the first-format header overhead data into a header of the second-format packet (Column 7 Line 62-64); (b) representing user data from the one or more first-format packets in a payload of the second-format packet (Column 7 Line 60-62, see Figure 3A); and (c) omitting from the second-format payload first-format header overhead data mapped into the second-format packet header of the second-format packet (Column 7 Line 40-41 and Column 60-62). Allan, however, does not teach omitting at least some of the padding bytes from the second-format payload. Mills teaches omitting at least some of the padding bytes from the second-format payload (Column 37 Line 5-10). It would have been obvious to one skilled in the art to modify Allan to remove padding as taught by Mills in order to use the bandwidth more efficiently.

Regarding to claim 20, Allan teaches the second-format data packets comprise MAC packets. the first-format data packets substantially comprise ATM cells (Figure 3A). Allan, however, does not teach the trailer packet substantially comprises an ATM trailer cell having CPCS and SSCS bytes; and wherein padding cells are omitted from the MAC packet, and the CPCS and SSCS bytes from the ATM trailer cell are omitted from the MAC packet. Mills teaches the trailer packet substantially comprises an ATM trailer cell having CPCS and SSCS bytes; and wherein padding cells are omitted from the MAC packet, and the CPCS and SSCS

Art Unit: 2668

bytes from the ATM trailer cell are omitted from the MAC packet (Column 37 Line 5-10). It would have been obvious to one skilled in the art to modify Allan to remove padding as taught by Mills in order to use the bandwidth more efficiently.

### Response to Arguments

6. Applicant's arguments with respect to claim 1-20, 23, 27-61 and 63-72 have been considered but are moot in view of the new ground(s) of rejection.

### Allowable Subject Matter

- 7. Claim 1-8, 23, 27-61 and 63-72 are allowed.
- 8. Claim 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax

Application/Control Number: 09/702,293 Page 9

Art Unit: 2668

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Clemence Han Examiner Art Unit 2668

STEVEN NGUYEN PRIMARY EXAMINER